March, 2021
North Central STEM Region
Monthly News

In this Issue
Register for Virtual Aviation Festival, April 12 - May 12
STEM BEST Program Application Now OPEN
Osage Teacher Leads with Multi-Faceted STEM

STEM BEST Program Supports Schools and Businesses to Expand Experiential Learning

Applications Due: May 10, 2021

The Iowa Governor’s STEM Advisory Council is now accepting applications for the STEM BEST (Business Engaging Students and Teachers) Program, which brings schools and businesses together to provide students with real workplace experiences. The program helps students discover their passions while gaining career-ready skills and introducing them to businesses and career opportunities in Iowa.

The STEM BEST Program encourages teachers and industry professionals to develop a work-based learning model that incorporates STEM subjects like mathematics and science with experiential learning opportunities to emphasize the necessary skills for the workplace. The awards can be used for the curriculum development and coordination, educator training and development in workplace-classroom integration, and preparing the work-based learning environment.
The application is available to Iowa public and non-public school districts and buildings serving students in grades K-12. The deadline for submitting applications is May 10, 2021. A total of 75 STEM BEST Program awards have been made throughout Iowa since 2014. Award recipients for the 2021-2022 STEM BEST Program will be announced in summer 2021.

For more information about the STEM BEST Program or to submit an application for the program, visit www.iowastem.org/STEMBEST. For tools to help get you started, see below.

---

**Join Us for a Virtual Aviation Festival**

**April 12 - May 12**

Virtual Aviation Festival will feature exciting videos of pilots in the areas of agriculture, commercial airlines and the military as well as flight instructors. There will be aviation challenges that you can take part in with prizes.

**Educators can register to win one of ten flight simulators to use in their classroom!**

Festival material will be open from April 12 until May 12.

**REGISTRATIONS - DUE APRIL 7**

[Click HERE to Register](#)

---

**PARTNERS:**

---

**Osage Teacher Leads with Multi-Faceted STEM:**

"We’re trying to create a community where professionals help students learn the necessary skills to lead, innovate, and collaborate."
For years, the Osage Community School District has been on the cutting-edge of STEM education and innovative learning, including a K-12 Computer Science Pathway and project-based high school curriculum grown out of past partnerships like Iowa BIG North. Kelley Molitor is a K-12 Teacher Librarian and Technology Coach who also teaches middle school computer science and a high school project-based learning course. Ms. Molitor has been a leader in bringing STEM programs to Osage through the STEM Scale-Up Program from hands-on early elementary STEM kits like Pint Size Science to advanced courses such as PLTW: Cybersecurity.

This year, a cybersecurity unit from PLTW: Cybersecurity was used in the middle school computer science course. Students learned digital content safety, understanding firewalls and malware, and managing their data. “Their final project had them collaborating with a partner to use the skills they learned to solve a mini cyber case,” she says. On bringing these courses into your school, Ms. Molitor says, “I think the first piece of advice I would have is, just do it. You’ll be happy you did as it helps you grow as an educator and provides great curriculum and training.”

Ms. Molitor also teaches a high school project-based course called Lead. In the course, students develop projects that extend out of brainstorming sessions with local businesses. One such project was a collaboration with Limestone Brewers to create a new root beer called Devil Drive Rootbeer. The students designed, brewed, and packaged the root beer.

Ms. Molitor took part in STEM Innovator training through the STEM Scale-Up Program. “STEM Innovator is a great program for educators as you get the opportunity to experience first hand the entire innovative process you will use with students. It has impacted me as an educator by understanding the process is the most important part and has helped me teach students that when something fails, we pivot and try another way,” says Ms. Molitor. The experience has allowed her to develop an innovative classroom where students pitch ideas and provide constructive feedback to each other, making it much more student centered and engaging.

Osage High School students Austin Clayton, Levi Ptacek and Spencer Adams work with Tony Wynohrad of Limestone Brewers to create Devil Drive Rootbeer.

Your STEM BEST Toolbox

WHERE TO START?

- Find an interested partner
- Involve your school district administrator
- Involve your stakeholders

WHO IS A PARTNER?
Local and regional businesses
Economic and workforce development groups
Other school districts
Higher education partners

Hear from STEM BEST Alum Firsthand!

Hear from two Waukee APEX students presenting how their experience as a STEM BEST Program Partner “fueled (their) fire more” to practice medicine.

Check out the CAM Cougar Network developed by the students at CAM High School, provided in the classroom with business teacher Shelly Miller as well as local partners.

Past STEM BEST® Awardees in North Central Iowa

- Ames School District
- BCLUW School District
- Boone EDGE
- Clear Lake School District
- Iowa BIG North
- Marshalltown Learning Academy
- Marshalltown School District
- North Iowa Community School District
- St. Mary School
- Story County Consortium

Are you interested in being an advocate for STEM and providing STEM opportunities to Iowa’s young people?

Consider applying for a position on the North Central STEM Region Advisory Board. Explore openings at the State of Iowa Talent Bank.

Calendar of Events

March 26
NC STEM Region Advisory Board Meeting 12-2 PM

April 7
Virtual Aviation Festival Registration Closes

April 12-May12

2020-2021 NC STEM Advisory Board

Jerry Chizek, Manson
Kristle Curtis, Mason City
Lindsey Falk, St. Ansgar
Ashley Flatebo, Garner
Sara Nelson, Ames
Michael Pedersen, Marshalltown
Kathy Rogotzke, Mason City
Sarah Rosenblum, Marshalltown
Virtual Aviation Festival

May 10

STEM BEST Application Closes

**Contact Us**

NC Regional Manager:
Dr. Kelly Bergman
Phone:
515-203-7247
E-mail:
kbergman@iastate.edu
Website:
ncstemhub.iastate.edu
Address:
Iowa State University
1259 Stange Rd
Ames, IA 50011-1002

Kay Schmalen, Clear Lake
Camille Sloan Schroeder, Boone
Matthew Stephan, Fort Dodge
Kerry Weig, Nevada
Nancy Woods, Boone
Michael Young, Ames
David Zrostlik, Garner